Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Kindly cancel original claims 1 - 15 without prejudice, in favor of new claims 16 - 31.

Claims 1 - 15. (Cancelled)

- 16. (New). A process for preparing isocyanoatoorganosilanes by thermolysis of carbamatoorganosilanes, wherein the thermolysis takes place with exposure to microwave radiation.
- 17. (New) The process of claim 1, wherein isocyanoatoorganosilanes of the formula (1) are prepared

$$R^2R^3R^4Si-R^1-N=C=O$$
 (1),

where

- R is a monovalent C_1 - C_{10} -alkyl radical,
- R^1 is a divalent C_1 - C_6 -hydrocarbon radical and
- R^2 , R^3 and R^4 are in each case independently of one another, a methyl, ethyl, n-propyl, isopropyl, methoxy, ethoxy, n-propoxy or isopropoxy radical,

by thermolysis of carbamatoorganosilanes of the formula (2)

$$R^2R^3R^4Si-R^1-NH-CO-OR (2).$$

18. (New) The process of claim 16, wherein the thermolysis takes place in the presence of a catalyst.

- 19. (New) The process of claim 17, wherein the thermolysis takes place in the presence of a catalyst.
- 20. (New) The process of claim 18, wherein the catalyst is a homogeneous catalyst.
- 21. (New) The process of claim 20, wherein the catalyst comprises one or more compounds selected from the group consisting of soluble compounds of tin, lead, cadmium, antimony, bismuth, titanium, zirconium, niobium, iron, cobalt, manganese, chromium, molybdenum, tungsten, nickel, copper, zinc, and soluble organic nitrogen bases.
- 22. (New) The process of claim 20, wherein the catalyst comprises one or more compounds selected from the group consisting of 1,4-diazabicyclo[2.2.2]octane, dibutyltin dilaurate, dibutyltin maleate, dibutyltin diacetate and dimethyltin dichloride.
- 23. (New) The process of claim 18, wherein the catalyst is a heterogeneous catalyst.
- 24. (New) The process of claim 23, wherein the catalyst comprises a metal or compound thereof, the metal selected from the group consisting of Sn(I), Sn(II), Pb(II), Zn(II), Cu(I), Cu(II), Co(I), Co(II), Na, K, Li, Rb, Cs, Sr, Ba, Mg, Ca, Cr, Mo, Ti, V, W, Ce, Fe, Ni, Si, Al, Ge, Ga, In, Sc, Y, La and lanthanides, Pd, Pt, Co, Rh, Cu, Ag, Au, Zn, Cr, Mo, W, Cd, Fe, N, O, B, C, and mixtures and alloys containing the abovementioned elements.
- 25. (New) The process of claim 23, wherein the catalyst comprises at least one oxide, hydroxide, oxyhydroxide, mixed oxide, acetate, formate, oxalate, tartrate, citrate, nitrate, carbonate, or mixtures of the above-mentioned compounds, of one or more elements

selected from the group consisting of Sn(I), Sn(II), Pb(II), Zn(II), Cu(I), Cu(II), Co(I), Co(II), Na, K, Li, Rb, Cs, Sr, Ba, Mg, Ca, Cr, Mo, Ti, V, W, Ce, Fe, Ni, Si, Al, Ge, Ga, In, Sc, Y, La and lanthanides, Pd, Pt, Rh, Ag, Au and Cd.

- 26. (New) The process as claimed in claim 23, wherein the catalyst comprises one or more compounds selected from the group consisting of TiO₂, ZrO₂, HfO₂, Al₂O₃, BaO, CaO, MgO, CeO₂, La₂O₃, Y₂O₃, Sm₂O₃, Yb₂O₃, Cr₂O₃, ZnO, V₂O₄, MnO₂, NiO, In₂O₃, Ga₂O₃, GeO₂, FeO, Fe₂O₃, Fe₃O₄, CuO, Co₃O₄, Fe(MoO₄)₃, MgO/CsOH, MgO/NaOH, aluminosilicates, zeolites, cordierite of the composition 2MgO·2Al₂O₃·5SiO₂, heteropolyacids, carbon, transition metal nitrides, transition metal borides, transition metal silicides and carbides.
- 27. (New) The process of claim 23, wherein the catalysts are provided on a support.
- 28. (New) The process of claim 27, wherein as a catalyst support, an inert refractory material is employed.
- 29. (New) The process of claim 26, wherein as a catalyst support, oxidic and nonoxidic ceramics, SiO_2 , carbon, aluminosilicates, magnesium aluminosilicates or resistant metallic materials are used.
- 30. (New) The process of claim 26, wherein catalyst supports are in the form of irregular granules, spheres, rings, half-rings, saddles, cylinders, trilobes, or monoliths.
- 31. (New) The process of claim 16, wherein a gas-phase reactor containing a heterogeneous catalyst is located downstream of the microwave reaction chamber.